

# WQPP Action Plans

## **Action Plan I**

Implementing Solutions to Urban Runoff

## **Action Plan II**

Regional Monitoring

## **Action Plan III**

Marinas and Boating

## **Action Plans IV**

Agriculture and Rural Lands

## **Action Plan V**

Beach Closures and Microbial Source Tracking

## **Action Plan**

Desal and Cruise Ships

## **Action Plan I**

Implementing Solutions to Urban Runoff

1996

Public Education/ Outreach

Technical Training

Regional Urban Runoff Management

Structural/ Non-structural Controls

Sediment/ Erosion

Storm Drain Inspections

CEQA Additions

## Prior to MS4 Phase I and II permits

Radio spots, bus ads, storm drain stenciling  
Brochures: Monterey Bay Begins on Your Street, Urban Watch

Restaurant outreach and surveys  
Video: Make the Connection

Best Management Practices (BMP) posters:  
Auto and Restaurant

Regional MURP 1998

Urban Watch, First Flush, source tracking

## Post MS4 Permit Initiation

First Flush/ Dry Run

Urban Watch in Pacific Grove

ASBS Monitoring Assistance

Illicit Discharge Detection Monitoring

BMP Effectiveness Monitoring

Emergency Response

Technical Advisory Committees

# First Flush

MBNMS-wide  
Coastal Watershed Council  
San Mateo County RCD

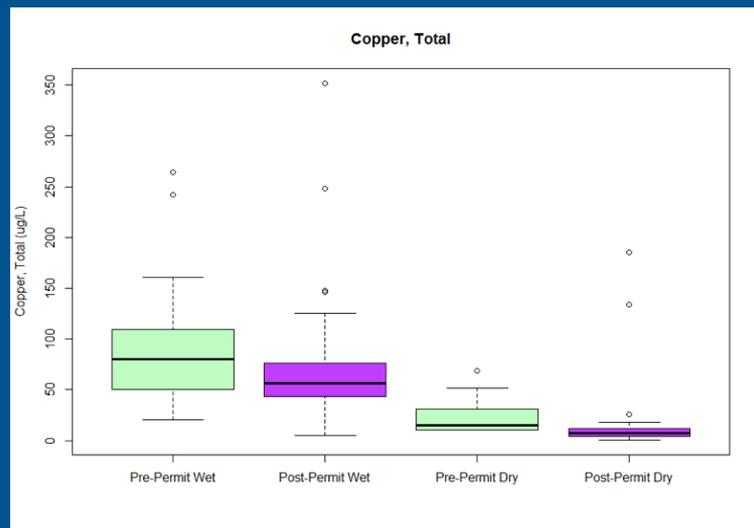
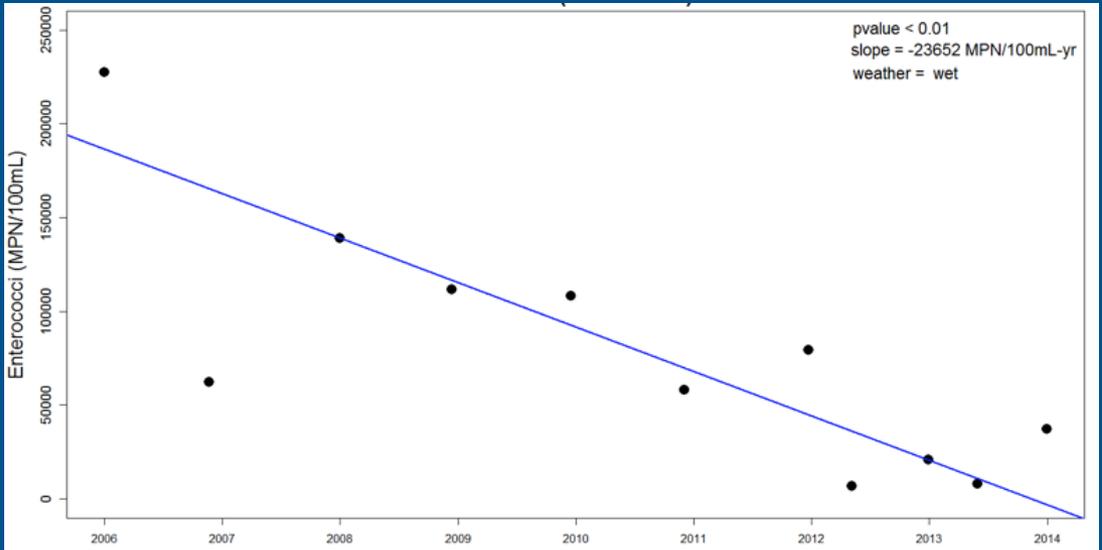
Monterey Peninsula area  
funded through MRSWMP

*E. coli*, enterococcus  
copper, zinc, lead  
nitrate, phosphate, ammonia, urea  
total suspended solids, turbidity  
fluoride, potassium, color, hardness



# 10 Year Data Analysis

- Pre and post permit concentrations
- 85<sup>th</sup> percentile
- Trend analysis
- Instantaneous load
- City consultations



# Urban Watch

Individual cities

Pacific Grove since 1998

Detergents

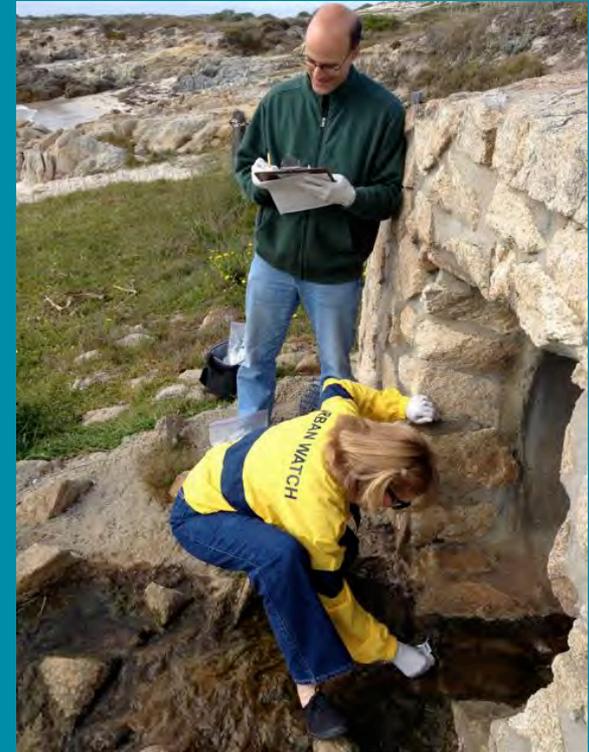
Ammonia

Phosphate

Chlorine

Bacteria

Trash (2014)



# MS4 Permit- E9c

Pacific Grove Illicit Discharge Detection

Annual inspection

Outfalls leading to ocean

>72 hours from rain

Volunteer assisted

2015 and 2016

*E. coli*, enterococcus

copper, zinc, lead

nitrate, phosphate, ammonia, urea total

suspended solids, turbidity fluoride,

potassium, color, hardness



# ASBS

## Areas of Special Biological Significance

Urban runoff sampling

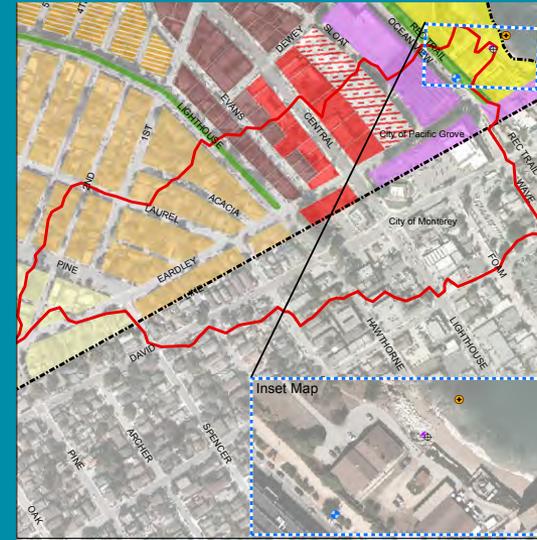
Reference site sampling

Mooring field sampling



# BMP Effectiveness

Phase 1,2,3,  
Diversion installation  
System effectiveness  
Receiving water monthly



Greenwood Park Watershed  
Infrastructure improvement  
CDS unit installation  
Bacteria reduction  
effectiveness

# BMP Effectiveness

Prop 50 -Clean Beach Initiative Grant

Lovers Watershed  
Infrastructure improvements  
Sanitary & storm drain systems  
Bacteria reduction effectiveness



# Emergency Response

Sewage Spills  
Source tracking



# TACs

## Technical Advisory Committees

San Mateo ASBS Grant

Ecology Action LID Grant

CCWG Storm Water Planning Grant

Greenwood Park TAC

Carmel River Watershed Conservancy

## Management Plan Update...

Outreach and Education

Facilitate coordination of regional efforts:  
WQPP, AWQA, IRWM, storm water

Better understand Land-Sea Connections

Identify effectiveness of BMPs and reduce  
pollutant loads

Communicate and promote water quality status  
and trends

What should MBNMS' role be in the future?

Are there areas that MBNMS should address that we currently are not?

Are there data gaps that MBNMS could address?



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